Improving Oral Hygiene in Patients After Stroke

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Oral care can be a challenging task for those who have impairments as a consequence of stroke. Physical weakness, lack of coordination and the cognitive problems that can accompany a stroke may prevent a person from maintaining good oral hygiene on their own. Dry mouth, oral ulcers and stomatitis may be caused by medication, which further impact on oral health.1 Many stroke patients rely on nursing staff for assistance with oral hygiene, yet oral care is not perceived as a care priority,2 and there are few training or care policies in place.3 Evidence-based supported oral care intervention is essential for this patient group. As in other aspects of poststroke care, rehabilitation goals that aim to maintain or regain independent oral care skills would be appropriate in the stroke care setting. However, there is a dearth of evidence...
underpinning staff-led oral care practice. This systematic review aims to assess the effectiveness of staff-led oral care interventions, as compared with standard care for ensuring oral hygiene for individuals after a stroke.

**Methods**

We searched the trials registers of the Cochrane Stroke Group and Oral Health Group (August 2005), the Cochrane Central Register of Controlled Trials (CENTRAL: The Cochrane Library, Issue 1, 2006), MEDLINE (1966 to February 2006), CINAHL (1982 to February 2006). We scanned reference lists from relevant articles and contacted authors and researchers in the field. We identified randomized controlled trials that evaluated one or more interventions designed to improve oral hygiene. Trials based on a mixed population were included, provided it was possible to extract the data specific to the individuals poststroke. Two reviewers independently classified trials for inclusion, assessed trial quality and extracted the data. Clarification was sought from study authors when required.

**Results**

Eight eligible randomized controlled trials were identified but only one provided stroke-specific information. It compared an oral health care training program delivered to nursing home care assistants to usual care (with delayed training). The data available for the 67 individuals with a stroke (obtained from the larger cluster randomized controlled trial) showed that denture plaque scores (Figure, A) were significantly reduced at 1 (P<0.00001) and 6 months (P<0.00001) after the intervention. Staff knowledge (P=0.002) and attitudes (P=0.0008) toward oral care had improved significantly 1 month after the training and continued to improve up to 6 months later (knowledge P=0.0008 and attitudes P=0.0001; attitude scores in the Figure, B). No change was observed on other oral hygiene measures (dental plaque, gingivitis or denture-induced stomatitis).

**Implications for Practice**

This review highlights the paucity of evidence relating to oral care interventions for patients after a stroke. Limited evidence suggests that training can change staff’s knowledge and attitude toward oral care and has a positive impact on patients’ oral hygiene as measured by denture cleanliness. Encouragingly, these benefits were still evident 6 months after the intervention, despite characteristically high nursing home staff turnover rates.

**Implications for Research**

Evidence specific to stroke care settings is urgently needed to evaluate the effectiveness of the oral care assessment tools, agents, equipment and oral hygiene promotion packages currently available. Particular emphasis should be given to those interventions that benefit intra-oral care. This is a brief summary of our systematic review with the full text available in the Cochrane Library (www.thecochranelibrary.com).

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**Disclosures**

None.

**References**


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